# Physikalisch-Technische Bundesanstalt

### Braunschweig und Berlin

Member State of OIML Germany



OIML Certificate N° R60/2000-DE1-06.03

### OIML CERTIFICATE OF CONFORMITY

#### **Issuing Authority**

Name:	Physikalisch-Technische Bundesanstalt
Address:	Bundesallee 100, 38116 Braunschweig
Person responsible:	Dr. Panagiotis Zervos

#### Applicant

Name:	Hottinger Baldwin Messtechnik GmbH
Address:	Im Tiefen See 45, 64293 Darmstadt
	Germany

Manufacturer of the certified type is the applicant.

Identification of the certified type	Strain gauge compression load cell
certified type	Type: RTN

Further characteristics see page 2

This Certificate attests the conformity of the above identified type (represented by the sample or samples identified in the associated Test Report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

**R60**, edition 2000 for accuracy class(es)  $C3 \div C5$ 

This Certificate relates only to the metrological and technical characteristics of the type of instrument covered by the relevant OIML Recommendation identified above.

This Certificate does not bestow any form of legal international approval.

## Physikalisch-Technische Bundesanstalt

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The conformity was established by the results of tests and examinations provided in the associated Test Reports

No. 1.12-4026436/1t
No. 1.12-4026436/33t
No. 1.12-4026436/10t
No. 1.12-4026436/150t

that includes 20 pages that includes 18 pages that includes 18 pages that includes 23 pages

The Issuing Authority

The CIML Member

Dr. P. Zervos Regierungsdirektor Dr. R. Schwartz Direktor und Professor

31.10.2006

31.10.2006

Identification of the pattern (continued)

The HBM compression strain gauge load cell type RTN is made of stainless steel, the strain gauge application is encapsulated hermetically by welding and a glass feed-through.

The metrological characteristics for application in approved weighing instruments are listed in Table 1.

Table 1

Accuracy class		C3	C4	C5	C3 MI 7,5	C4 MI 7,5
Max. number of load cell intervals	<b>n</b> <sub>LC</sub>	3000	4000	5000	3000	4000
Maximum capacities	E max	1 t* / 2,2t / 4,7t / 10t / 15t / 22t / 33t 47t / 68t / 100t / 150t / 220t / 330t / 470t	1t / 2,2t / 4,7t / 10t / 15t / 22t / 33t / 47t / 68t / 100t			
Minimum LC verification interval	V <sub>min</sub> (Y)	E <sub>max</sub> / 20 000	E <sub>max</sub> / 24 000			
Minimum dead load output return	DR (Z)		-	½ E <sub>max</sub> / 7500		/ 7500

Minimum dead load  $0\% * E_{max}$ ; Safe load  $\ge 150\% * E_{max}$ ; Input resistance  $\sim 4.4 \text{ k}\Omega$ ,

Classification symbol "MI" for application in multi-interval weighing instruments with small DR, see OIML R76; \*) RTN - C3 - 1 t also with  $v_{min} = E_{max}/10\,000$ ,  $v_{min}$  is indicated on name plate.

*Important note:* Apart from the mention of the Certificate's reference number and the name of the OIML Member State in which the Certificate is issued, partial quotation of the Certificate and of the associated Test Report(s) is not permitted, although either may be reproduced in full.